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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,256

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EXAMINER

BLIZZARD, CHRISTOPHER JAMES

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,256	Applicant(s) SAUZADE ET AL.	
	Examiner CHRISTOPHER BLIZZARD	Art Unit 3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/16/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 7-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 13-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/16/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Species I, a fluid dispensing device with a piezoelectric pressure sensor in fig. 1

Species II, a fluid dispensing device with an optical fiber pressure sensor in fig. 4

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

2. The claims are deemed to correspond to the species listed above in the following manner:

Claims 1-6 and 13-19 correspond to species I
Claims 7-12 correspond to species II

The following claim(s) are generic: None.

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3. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Species I contains a piezoelectric detector, and species II contains an optical fiber detector.

4. During a telephone conversation with Raja Saliba on 5/20/09 a provisional election was made without traverse to prosecute the invention of species I, claims 1-6 and 13-19. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7-12 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 5, 6, 15 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 5 recites the limitation "in breathing mode" in the second line of the claim. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 6 recites the limitation "said PVDF tube" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 15 recites the limitations "the valve member" and "the actuating rod" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such

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omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the adaptation necessary for a pump to dispense “the fluid such that it is so finely sprayed that the spray is undetectable by the user”.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 1-3, 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rocci (5,676,129) in view of Jones (7,168,597).

13. Regarding claims 1-3, 18 and 19, Rocci discloses a fluid dispensing device including a fluid dispensing member in the form of a metering valve (3) and a dispensing head (10) and a dispensing orifice (11) connected by a expulsion channel (7), within the channel is a tube with a dynamic pressure sensing detector (12) (Abstract) (column 5, lines 14-20) (fig. 3) used to send a signal to the user when a dose of fluid has been dispensed (column 3, lines 65-67). Rocci teaches a detector (12) for detecting fluid going from the dispenser to the orifice. Detector (12) users a network of resistors such that when the resistance of one of the resistor is changed due to change in pressure in the transfer channel the voltage will deflect in a positive or negative manner reflecting change. This would appear to be appear to be very similar to a piezoelectric detector. Jones teaches a metering valve with a piezoelectric pressure sensor to detect a user's

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breath (column 17, lines 44-46; column 18, lines 5-10 and 20-22). Since Jones teaches a piezoelectric pressure sensor to detect changes in pressure this would be an obvious equivalent detector for performing the same function. It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the dispensing detector of Rocci with a piezoelectric detector as taught by Jones as an obvious equivalent alternative means for detecting the presence of fluid.

14. Regarding claim 13, Rocci discloses the detector (12) being disposed in a sleeve (column 5, lines 14-15) and that one end is co-operating with the dispenser member (3, 4) (fig. 3) and the other end is co-operating with the dispenser head (10) (fig. 3).

15. Regarding claim 14, Rocci discloses the claimed invention except for the sleeve being made of two parts. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the sleeve out of two parts, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

16. Regarding claim 15, Rocci discloses the claimed invention wherein the sleeve is engaged around the dispensing member (3), part of which acts as a valve member to actuate to dispense fluid from the canister (1).

17. Regarding claim 16, Rocci discloses the detector (12) attached to an electronic means (14) for processing the signals

18. Regarding claim 17, Rocci discloses the device wherein the detector is adapted to increment or decrement a dose counter (Abstract).

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19. Claim 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rocci (5,676,129) and Jones (7,168,597) as applied to claims 1 and 2 above, and further in view of Uber (6,353,324).

20. Regarding claims 4-6, Rocci and Jones teach the claimed device except for the piezoelectric material being polyvinylidene fluoride. Uber teaches an electric circuit with piezoelectric detectors comprising polyvinylidene fluoride (column 1, line 31). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the device taught by Rocci and Jones with polyvinylidene fluoride for use in a piezoelectric sensor as taught by Uber since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wolf (5,809,977, 6,148,815) medication chronologs with piezoelectric pressure sensors and Jones (7,347,200) a medicament dispenser with pressure sensors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER BLIZZARD whose telephone number is (571)270-7138. The examiner can normally be reached on Monday thru Friday, 9:00AM -5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571)2724835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHRISTOPHER BLIZZARD/
Examiner, Art Unit 3771

/Danton DeMille/
Primary Examiner, Art Unit 3771